

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS FOR 150 Alexandra, Vigoria 2213-1450 www.napie.gov

DATE MAILED: 07/16/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,073	10/10/2001	Yasuhisa Abe	041514-5149	4681
9629	7590 07/16/2003			
MORGAN LEWIS & BOCKIUS LLP			EXAMINER	
1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004		W	LOCKETT, KIMBERLY R	
			ART UNIT	PAPER NUMBER
			7027	

Please find below and/or attached an Office communication concerning this application or proceeding.

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s).			AL.					
Examiner		Application No.	Applicant(s)	_				
Later Lat	05.	09/973,073	ABE ET AL.					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address—Period for Repty A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Edemics of firm may be available under the provisions of 3 CFR 1.13(ig). In no event, however, may a reply be firmely filed after SIX (5) MONTHS from the mailing date of this communication. Edemics of the may be available under the provisions of 3 CFR 1.13(ig). In no event, however, may a reply be firmely filed after SIX (5) MONTHS from the mailing date of this communication. Fallur to reply within the set or extended period for reply will, by stanked, period vall again and velocity SIX (MONTHS from the mailing date of this communication. Fallur to reply within the set or extended period for reply will, by stanked, cause the application to become ABANDONED (58 U.S.C. § 133). Any reply received by the Office little than there morins after the mailing date of this communication. even if timely filed, may reduce any Status 1) Seponsive to communication(s) filed on 07 July 2003. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 6.16 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 5.16 is/are allowed. 6) Claim(s) 5.16 is/are rejected. 7) Claim(s) 5.16 is/are rejected. 7) Claim(s) 6.16 is/are rejected. 7) Claim(s) 6.16 is/are rejected. 10) The drawing(s) filed on 5.16 is/are allowed. 10) The drawing(s) filed on 5.16 is/are allowed. 11) The proposed drawing correction filed on 6.16 is/are allowed. 12 is/are drawings are required in reply to this Office action. 12 is/are drawings are required in reply to this Office action. 13 acknowledgment is made of a claim for forei	Office Action Summary	Examiner	Art Unit	_				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions at 3°C FR 1.136(a). In no event, however, may a reply be finely filled. Extensions of time may be available under the provisions at 3°C FR 1.136(a). In no event, however, may a reply be finely filled. Extensions of time may be available under the provisions at 3°C FR 1.136(a). In no event, however, may a reply be finely filled. Extensions of time may be available under the provisions at 3°C FR 1.136(a). If NO period for reply is appelled above, the mainting of the community of the statistic provision of the provision of the community of the statistic provision of the statistic provision. Failure to reply which the stor extended period for reply is statistic. Failure to reply which the stor extended period for reply is statistic. Failure to reply which the stor extended period for reply the statistic, asset the application is communication. Failure to reply which the stor extended period for reply the statistic, asset the application is communication. Status 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 6.16 is/are pending in the application. 4a) Of the above claim(s) is a state withdrawn from consideration. 5 Claim(s) 5.16 is/are rejected. 7) Claim(s) is/are allowed. 6) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8 Claim(s) is/are objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is a) accepted or b) objected to by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) Th				_				
THE MAILING DATE OF THIS COMMUNICATION. Extensions of mer may be waited under the provision of 37 CPR 1 15(0). In no event, however, may a reply be timely fitted after SX (6) MONTHS from the mailing date of his communication. If the period for engly specified belove is less than thing (3) days, a reply within the statistical statistics (6) MONTHS from the mailing date of his communication. Fallweb or reply within the set or extended parient for reply will, by attauts, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office eith rich three months after the mailing date of this communication, even if timely fitted, may reduce any seamed patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filled on 07 July 2003. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 c.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 6-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 6-16 is/are rejected. 7) Claim(s) is/are allowed. 6) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are allowed. 11) The proposed drawing correction filed on is/are: a) accepted or b) behalf in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved by disapproved by the Examiner. 12) The oath or declaration is objected to by the Examiner. 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 14)		ears on the cover sheet with the o	correspondence address					
2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 6-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(e)	THE MAILING DATE OF THIS COMMUNICATION. Estensions of them gay be uniable lungther the provisions of 37 CFR 1.1 after SIX (6) MONITHS from the mailing date of this communication. If the period for reply specified above lise start thirtly (30) days, a reply. If NO period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply within the set or extended period for reply with great the set. Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.74(b).	36(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day all apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 6-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 6-16 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12 The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 (a) - (d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received. 2. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). All boll Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). All olimitation of the foreign language provisional applica	1) Responsive to communication(s) filed on <u>07 J</u>	uly 2003 .						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4)	2a) ☐ This action is FINAL . 2b) ☑ Thi	is action is non-final.						
Disposition of Claims 4) ○ Claim(s) 6-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ○ Claim(s) is/are objected to. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Application Papers 9) □ The proposed drawing correction filed on is: a) □ approved b) □ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) □ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some *c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 2. □ See the attached detailed Office action for a list of the certified copies not received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received. 15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(e) 10 □ Notice of References Cited (PTO-982) 4) □ Interview Summary (PTO-413) Paper No(s) 5 □ Notice of Informal Patent Application (PTO-152)								
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) is/are allowed. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) □ The proposed drawing correction filed on is: a) □ approved b) □ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) □ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received. 15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1 □ Notice of References Cited (PTO-892) 2) □ Notice of Paffsperson's Patent Drawing Review (PTO-948)		Ex parte Quayle, 1935 C.D. 11, 4	103 O.G. 213.					
5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are objected to. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) □ The proposed drawing correction filed on is: a) □ approved b) □ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) □ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 and 120 13) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1.□ Certified copies of the priority documents have been received. 2.□ Certified copies of the priority documents have been received in Application No 3.□ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received. 15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121. Attachment(s) 1 Motice of References Cited (PTO-892) 2 Notice of Paffsperson's Patent Drawing Review (PTO-948) 5 Notice of Informal Patent Application (PTO-152)	4) Claim(s) 6-16 is/are pending in the application							
6) Claim(s) 6-16 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 (a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121. Attachment(s) Notice of References Cited (PTO-892) 2) Notice of Pafsperson's Patent Drawing Review (PTO-948) 5 Interview Summary (PTO-413) Paper No(s)	4a) Of the above claim(s) is/are withdraw	vn from consideration.						
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some color None of: 1	5) Claim(s) is/are allowed.							
8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some *c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121. Attachment(s) Notice of References Cited (PTO-982) b) Notice of References Cited (PTO-982) c) Notice of Informal Patent Application (PTO-152)	6)⊠ Claim(s) <u>6-16</u> is/are rejected.							
Application Papers 9	7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1 Interview Summary (PTO-413) Paper No(s) 5 Notice of Informal Patent Application (PTO-152)		r election requirement.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) ☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1 ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Informal Patent Application (PTO-152)	· _ ·							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1 Interview Summary (PTO-413) Paper No(s) 5 Notice of Informal Patent Application (PTO-152)								
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121. Attachment(s) Interview Summary (PTO-413) Paper No(s) 5 Notice of References Cited (PTO-892) 2) Notice of Braftsperson's Patent Drawing Review (PTO-948)		·- · ·						
If approved, corrected drawings are required in reply to this Office action. 12								
12 The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13 Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(e) Interview Summary (PTO-413) Paper No(s) 2) Notice of References Cited (PTO-982)								
Priority under 35 U.S.C. §§ 119 and 120 13)								
13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1 ☐ Interview Summary (PTO-413) Paper No(s) 5 ☐ Notice of Reterences Cited (PTO-892) 2) ☐ Notice of Informal Patent Application (PTO-152)								
1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1 ☐ Interview Summary (PTO-413) Paper No(s) 5 ☐ Notice of Reterences Cited (PTO-892) 2 ☐ Notice of Informal Patent Application (PTO-152)	11 <u>1</u>	priority under 35 U.S.C. § 119(a)-(d) or (f).					
2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 10 ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Informal Patent Application (PTO-152)	a) All b) Some * c) None of:		, , , , ,					
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 10. ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Informal Patent Application (PTO-152)	1. Certified copies of the priority documents have been received.							
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 10 ☐ Notice of References Cited (PTO-982) 2) ☐ Notice of Informal Patent Application (PTO-152)	2. Certified copies of the priority documents have been received in Application No							
a) The translation of the foreign language provisional application has been received. 15] Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 15 Interview Summary (PTO-413) Paper No(s) 2) Notice of Partsperson's Patent Drawing Review (PTO-948) 5 Notice of Informal Patent Application (PTO-152)	application from the International Bureau (PCT Rule 17.2(a)).							
15)								
1) 🖄 Notice of References Cited (PTC-892) 4) 📗 Interview Summary (PTC-413) Paper No(s) 2) 🗋 Notice of Draftsperson's Patent Drawing Review (PTC-948) 5) 📄 Notice of Informal Patent Application (PTC-152)		**						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)	Attachment(s)							
	2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of Informal I						

Application/Control Number: 09/973,073

Art Unit: 2837

Claim Rejections - 35 USC § 103

 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- Claims 6 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuke in view of Okazaki et al.
- 3. Fuke et al discloses the use of a speaker comprising a voice coil bobbin (11), a voice coil(12) wound around the voice coil bobbin, a diaphragm (10) supported by the voice coil bobbin; and a metallic plate (21) attached to a heat radiating side. Fuke does not specifically say that his metallic plate is attached to a heat radiating side of the diaphragm for radiating heat generated in the voice coil, voice coil bobbin and diaphragm
- 4. Okazaki et al discloses the use of a speaker comprising a voice coil bobbin (13), a voice coil(9) wound around the voice coil bobbin, a diaphragm (8) supported by the voice coil bobbin; and a metallic plate (14) that is a heat radiation member (claim 14) attached to a heat radiating side of the diaphragm for radiating heat generated in the voice coil, voice coil bobbin and diaphragm (see column 2, lines 8-20). Regarding claim 10, the diaphragm is dome shaped (see figure 3). Regarding claim 11, the metallic plate(21) does not cover all the heat radiating g side of the diaphragm (see figure 2).

Application/Control Number: 09/973,073 Art Unit: 2837

Regarding claim 12, Okazaki discloses an edge portion around the periphery of the diaphragm (see figure 2).

- 5. It would have been obvious to one or ordinary skill in the art at the time the invention was made to modify to diaphragm as disclosed by Fuke and the position as disclosed by Okazai in order to provide a light weight voice coil.
- 6. Claims 7-9, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuke in view of Okazaki et al and Inoue.
- 7. Fuke and Okazaki does not disclose the use of a diaphragm molded by injection molding, metallic elements or a recess portion to receive the metallic plate.

Inoue discloses the use of a speaker diaphragm main body from a resin made by injection molding (claim 7); and a metallic plate(16-19) where the metal plate has a plurality of elongated metal elements(claim 8) that radially extend from the bobbin(11). The diaphragm as disclosed by Inoue also discloses the use of a recess portion(claim 9) to receive the metal plate (see figure 2) and has a dome (6) and conical shape.

It would have been obvious to one or ordinary skill in the art at the time the invention was made to modify to diaphragm as disclosed by Fuke and the position as disclosed by Okazai and the with the injection molding, recess portion and metallic elements as disclosed by Inoue in order to reproduce clear sounds with good audio characteristics.

Response to Arguments

 Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

 Any inquiry of a general nature or relating to the status of this application or filed papers should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Papers related to this application may be submitted to Group 2800 by facsimile transmission. Papers should be faxed to Group 2800 via the PTO 2800 Fax Center located at Crystal Plaza 4. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 O.G. 30 (November 15, 1989). The Group 2800 CP 4 Fax Center number is (703) 308-77(22 or 24). Fax numbers that provide an autoreply fax receipt are: for before finals (703) 872-9318 and after finals (703) 872-9319.

For assistance in Patent procedure, fees or general Patent questions calls should be directed to the Patents Assistance Center (PAC) whose telephone number is 800-786-9199. Assistance is also available on the Internet at www.uspto.gov.

For requesting copies of Cited Art, Office Actions or the like, or General

Problem solving, calls should be directed to the TC 2800 Customer Service Office
whose telephone number is 703-306-3329 or by fax at 703-306-5515.

Art Unit: 2837

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Lockett whose telephone number is (703) 308-7615. The examiner can normally be reached on Monday through Thursday from 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi, can be reached on (703) 308-3370.

Kim Lockett Patent Examiner Art Unit 2837

> KIMBERLY LOCKETT PRIMARY EXAMINER